

Db 356 GAACCTTCAAGCTGACGGAGATCCCGGAGGCGAGATCCAGAGGCTCCAGAGCTGCT 415
Qy 635 GAGAACTTTCAATCAACCTGATTTCTCAATTAAGTAACTACTGTAAAGCTTTATTTTT 694
Db 416 CAGACCTCAACAGCGGAGCTCCAGCTCCAGCTCCAGCTCCAGCTCCAGCTCCAGCT 475
Qy 695 GTCTGAGGTTTAAATTTGGTTGACAAATTTCTAGAGAGCTCAAGAACTATATCATAG 754
Db 476 GTCCGAGGGCTCAAGCTCGTGAATTTCTGGAGGAGCTGAAGAAGCTCTACCACTC 535
Qy 755 TGAGGCTTTTACCGTTAAATTTGGTGATCTAGGAGGCTAAAGAACTAAATTAATGATTA 814
Db 536 CGAGGCTTTACCGTTAAATTTGGTGATCTAGGAGGCTAAAGAACTAAATTAATGATTA 595
Qy 815 TGTGAGAAAGGACCCAGGCTAAAGTCTGAGGAGCTAAAGAACTAAATTAATGATTA 874
Db 596 CGTCGAGAGGGACCCAGGCTAAAGTCTGAGGAGCTAAAGAACTAAATTAATGATTA 655
Qy 875 CGTCTCGGACCTAGTAACTATATTTTTCAGAGGCTAAAGTCTGAGGAGCTAAAGT 934
Db 656 CGTCTCGGACCTAGTAACTATATTTTTCAGAGGCTAAAGTCTGAGGAGCTAAAGT 715
Qy 935 TAAAGTACTGAGAGGAGGAGTCTTCAATGATTAAGTCTGAGGAGCTAAAGTCTGAGG 994
Db 716 GAGGACACCGAGGAGGAGGAGTCTTCAATGATTAAGTCTGAGGAGCTAAAGTCTGAGG 775
Qy 995 GATGAAAGACTGGGTATGTTCAATATTAAGTCTGAGGAGCTAAAGTCTGAGGAGCT 1054
Db 776 GATGAAAGACTGGGTATGTTCAATATTAAGTCTGAGGAGCTAAAGTCTGAGGAGCT 835
Qy 1055 ATTAATGAGTATTTAGTAAAGCTGCTGATTTTTCAGAGGCTAAAGTCTGAGGAGCT 1114
Db 836 CCTCATGAGTATTTAGTAAAGCTGCTGATTTTTCAGAGGCTAAAGTCTGAGGAGCT 895
Qy 1115 TCAACATTTAGAGTATGAGTAAAGCTGCTGATTTTTCAGAGGCTAAAGTCTGAGGAG 1174
Db 896 CAGACACCTGGAGAGGAGGAGTCTTCAATGATTAAGTCTGAGGAGCTAAAGTCTGAGG 955
Qy 1175 TCGTCTGAGGCTTCTGTCGACCTGCGCAAGTAAAGTATCAGGAGCTTACGACTTAA 1234
Db 956 CAGGCGCTTCCGCTAGCTTCCAGCTTCCAGCTTCCAGCTTCCAGCTTCCAGCTTCC 1015
Qy 1235 ATCTGTTTATAGGCTTATGATTAAGTAAAGTCTTCCAGGCTTCCAGGCTTCCAGG 1294
Db 1016 GAGGCTGCTGGGCTAGCTTCCAGCTTCCAGCTTCCAGCTTCCAGCTTCCAGCTTCC 1075
Qy 1295 TGTACTGAGAGGCTCCATTAAGTAAAGTCTTCCAGGCTTCCAGGCTTCCAGGCTTCC 1354
Db 1076 CGTGACGAGGAGGCTTCCAGCTTCCAGGCTTCCAGGCTTCCAGGCTTCCAGGCTTCC 1135
Qy 1355 TGATGAAAGGCTACCGAGGCTTCCAGGCTTCCAGGCTTCCAGGCTTCCAGGCTTCC 1414
Db 1136 CGAGGAGAGGAGGAGGAGGAGGCTTCCAGGCTTCCAGGCTTCCAGGCTTCCAGGCTTCC 1195
Qy 1415 TCCACCAAGAGTAAATTTAAATTAAGCTTCCAGGCTTCCAGGCTTCCAGGCTTCCAGG 1474
Db 1196 CCGGCGGAGGCTCAAGTCAAGAGGCTTCCAGGCTTCCAGGCTTCCAGGCTTCCAGG 1255
Qy 1475 AGCCCATGTTTATGGGTAAGGTTGTCACCACTCAGAGT 1518
Db 1256 GAGCCCTTCTTCAATGGGAGGCTGCTCAACCCACGAGAGT 1299

RESULT 3
US-09-023-339-3
: Sequence 3, Application US/09023339
: Patent No. 6127145
: GENERAL INFORMATION:
: APPLICANT: Sutliff, Thomas D.
: APPLICANT: Rodriguez, Raymond L.
: TITLE OF INVENTION: Production of 1-Antitrypsin
: TITLE OF INVENTION: in Plants

NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dehlinger & Associates
STREET: P.O. Box 60850
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94306
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,339
FILING DATE: 13-FEB-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/037,991
FILING DATE: 13-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: Petithory, Joanne R
REGISTRATION NUMBER: P42,995
REFERENCE/DOCKET NUMBER: 0665-0003.30
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-324-0960
TELEFAX: 650-324-0960
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 1185 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
CLONE: codon-optimized AAT coding sequence
US-09-023-339-3

Query Match 41.3%; Score 629.4; DB 3; Length 1185;
Best Local Similarity 70.8%; Pred. No. 2.2e-153;
Matches 837; Conservative 0; Mismatches 346; Indels 0; Gaps 0;
Qy 336 GAGACGCTCAAGCGGAGCGGCTCAAAAACCGACACGAGTCAATCAGCAGCAAGACCAT 395
Db 1 GAGGACCGCGAGCGGAGCGGCGCCAGAGACCGCAGCAGCAGCAGCAGCAGCAGCAG 60
Qy 396 CCGACTTTTAAATAATTAATCAAAATTTAGCCGAATTTGCTTTTCTTTTGTATAGACAA 455
Db 61 CCGAGCTTCAACAGATCAACCGGAATTTGGCGAATTTCCGCTTACGCTGTACCGCAG 120
Qy 456 TTAGCTCATCAAAAGTAACTTACTTAACATTTTGTAGTCTTGTCTTATGCCACTGCT 515
Db 121 CTGGCGCAGCTCAACCTCCACCAACATCTTCTTACGCCGCTGAGCATGCCACCGCC 180
Qy 516 TTGCGCATGTTAGTTTAGTACTTAAAGCGGATACCATGAGGAGATTTTGAAGGTTTA 575
Db 181 TTGCGCATGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 240
Qy 576 AACTTTAATTTGACCAAAATCCAGAGGCCAAATTCAGAGGGTTTTCAGAGGTTGTTG 635
Db 241 AACTTCAACCTGACGAGATCCCGGAGGCGAGATCCAGAGGGCTTCCAGGAGCTGCTC 300
Qy 636 AGAATTTTGAATCAACCTGATTTCTCAATTTGCAATTTAACTACTGTTAGCGTTTATTTTG 695
Db 301 AGGACGCTCAACCGCGGAGCTCCAGCTCCAGCTCCAGCTCCAGCTCCAGCTCCAGCTCC 360
Qy 696 TCTGAAGTTTAAATTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTG 755
Db 361 TCCGAGGGCTTCAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 420
Qy 756 GAGGCTTTTACCGTTAAATTTTGGTGTATCTGAGGAGCTTAAAGAGCAATTAATGATTAT 815
Db 421 GAGGCTTACCGTTAAATTTTGGTGTATCTGAGGAGCTTAAAGAGCAATTAATGATTAT 480
Qy 816 GTTGAGAAAGGACCCAGGCTTACCTGTTGACCTAGTTTAAAGAAATTTAGATCGTGATACC 875

Mon Dec 9 12:50:51 2002

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481 GTCGAGAGGGAGCCAGGCGAGATCGTGGACCTGCTCAAGAAATGGACAGGACACC 540
QY 876 GTCCTCGCAGCTAGTAACTATATATTTTCAAGGGTAAGTGGAAAGTCTTTCGAGGTT 935
Db 541 GTCCTCGCAGCTAGTAACTATATTTTCAAGGGTAAGTGGAAAGTCTTTCGAGGTT 600
QY 936 AAGATAGTAAAGAGGAGAGTATTTTCAAGGGTAAGTGGAAAGTCTTTCGAGGTT 995
Db 601 AAGGACACCGAGGAGGAGTCTTCCAGCTGACACCGTCAAGGTCCCGATG 660
QY 996 ATGAAAGAGCTGGGTATGTTCAATATTTCAACATTTGCAAGTAAAGTCTTTCGAGGTT 1055
Db 661 ATGAAAGAGCTGGGTATGTTCAATATTTCAACATTTGCAAGTAAAGTCTTTCGAGGTT 720
QY 1056 TTAATGAAGTATTTAGTAAAGCTAGTCTATTTTTCAGAGGAGTAAAGTCTTTCGAGGTT 1115
Db 721 CTCATGAAGTATTTAGTAAAGCTAGTCTATTTTTCAGAGGAGTAAAGTCTTTCGAGGTT 780
QY 1116 CAACATTTAGAGAGTGGTGGTATGACTATGACATATTTTACATTTTTCAGAGGAGT 1175
Db 781 CAGCAGCTGAGAGAGTGGTGGTATGACTATGACATATTTTACATTTTTCAGAGGAGT 840
QY 1176 CGTGTAGGCTCTCTGACCTGCGAAGTAAAGTATGACATGACCTGACCTTAAAG 1235
Db 841 AGCGCTCGGCTAGGCTGACCTGCGAAGTAAAGTATGACATGACCTGACCTTAAAG 900
QY 1236 TCTGTTTATAGGCTAGGCTGATTTACCAAGTAAAGTATGACATGACCTGACCTTAAAG 1295
Db 901 AGCGCTCGGCTAGGCTGACCTGCGAAGTAAAGTATGACATGACCTGACCTTAAAG 960
QY 1296 GTTACTGAAGAGCTCCATTAATTAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT 1355
Db 961 GTTACTGAAGAGCTCCATTAATTAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT 1020
QY 1356 GATGAAAGAGTACCGAGGCGCGGCTATGTTCTGCTGGAAGTATTTCCATGAGCAT 1415
Db 1021 GATGAAAGAGTACCGAGGCGCGGCTATGTTCTGCTGGAAGTATTTCCATGAGCAT 1080
QY 1416 CCACGAGAGTAAATTTAATTAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT 1475
Db 1081 CCACGAGAGTAAATTTAATTAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT 1140
QY 1476 AGCCATGTTTATGGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT 1518
Db 1141 AGCCATGTTTATGGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT 1183

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RESULT 4
US-09-023-173-5
; Sequence 5, Application US/09023173
; Patent No. 6066781
; GENERAL INFORMATION:
; APPLICANT: Sutliff, Thomas D.
; APPLICANT: Rodriguez, Raymond L.
; TITLE OF INVENTION: Production of Mature Proteins
; TITLE OF INVENTION: in Plants
; NUMBER OF SEQUENCES: 23
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dehlinger & Associates
; STREET: 350 Cambridge Ave., Suite 250
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94306
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/023.173
; FILING DATE: 13-FEB-1998

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CLASSIFICATION: 435
PRIOR APPLICATION DATA: 60/038,168
FILING DATE: 13-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: Petithory, Joanne R.
REGISTRATION NUMBER: P42995
REFERENCE/DOCKET NUMBER: 0665-0007.30
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-324-0880
TELEFAX: 650-324-0960
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 1260 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
CLONE: codon-optimized Ramy3D signal-mature AAT
US-09-023-173-5
Query Match 41.3%; Score 629.4; DB 3; Length 1260;
Best Local Similarity 70.8%; Pred. No. 2.3e-153; Indels 0; Gaps 0;
Matches 837; Conservative
QY 336 GAAGACCTCAAGGCGAGCGCTCAAAAACCGACAGTATCATCAGACCAAGACCAT 395
Db 76 GAGGACCCCGAGGCGAGCGCTCAAAAACCGACAGTATCATCAGACCAAGACCAT 135
QY 396 CGGACCTTTTAAATAAATACTCCAAATTTAGCCGAAATTTGCTTTTCTTATAGACAA 455
Db 136 CGGACCTTTTAAATAAATACTCCAAATTTAGCCGAAATTTGCTTTTCTTATAGACAA 195
QY 456 TTAGCTCATCAAGTAAATTTTACTTAACATTTTCTTCTTCTTCTTCTTCTTCTTCTT 515
Db 196 CTGCGGACCGAGTCCAACTCCACCAACATCTTCTTCAAGCCGCTGAGCATGCCACGCC 255
QY 516 TTGCGCATGTTGAGTTAGGTACTAAGCCGATATCCCATGACGAGATTTTGAAGGTTTGA 575
Db 256 TTGCGCATGTTGAGTTAGGTACTAAGCCGATATCCCATGACGAGATTTTGAAGGTTTGA 315
QY 576 AACTTTAATTTGACGAAATCCAGAAAGCCCAAAATTTACAGAGGTTTTCAGAGTTGTTG 635
Db 316 AACTTTAATTTGACGAAATCCAGAAAGCCCAAAATTTACAGAGGTTTTCAGAGTTGTTG 375
QY 636 AGAATTTTGAATCAACCTGATTTCTCAATTTGCAATTTACTACTGTTAACTGTTTATTTT 695
Db 376 AGGACGCTCAACCAAGCGGAGTCTCCAGCTCCAGCTCAACCAAGCGGCTCTTCCCTG 435
QY 696 TCTGAAGGTTTAAATTTGGTGGACAAATTTCTTGAAGACGTCAGAAAGCTATATATATAT 755
Db 436 TCCGAGGCGCTCAAGCTCGTGGATAGTTCTTGGAGGAGTGAAGAGCTCTTACCCTCC 495
QY 756 GAGGCTTTTACCGTTAAATTTTGGTATGATCTAGAGAGCTAAAAGCAAAATTAATGATTAT 815
Db 496 GAGGCTTTTACCGTTCAACTTCCGGGACACCGGAGGAGGAGGAGGAGGAGGAGGAGGAG 555
QY 816 GTTGAGAAAGGACCCAGGTTAAGATCGTTGACCTAGTTTAAAGAAATTTAGATCGTGATCC 875
Db 556 GTTCGAGAAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 615
QY 876 GTCTTCGCACTAGTTAACTATATTTTCAAGGTTAAGTGGGAAAGCTCTTTCGAGGTT 935
Db 616 GTCTTCGCGCTCGTCACTACATCTTCTTCAAGGCAAGTGGGAGCGCCGCTTCGAGGTT 675
QY 936 AAAGATACCTGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 995
Db 676 AAGGACACCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 735
QY 996 ATGAAAGAGCTGGGTATGTTCAATATTTCAACATTTGCAAGTAAAGTCTTTCGAGGTT 1055
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QY 1056 TTAATGAAGTATTTAGTGAACGCTACTGCTATTTTACACGAGCAAGGTAAGCTT 1115
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QY 1116 CAACATTTAGAGAAATGAGTTGACTCATGACATTTATTAATTTTACGAGCAAGGAT 1175
D 1175
Db 856 CAGCAGCTGGAGAACGAGCTGACGACGACATCATCAGAAATTTCTGGAGCAAGGAC 915
QY 1176 CGTCGAGGCTCTCTGACCTGCGCAAGTAAAGTATACCGGTACTTACGACTTAAA 1235
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Db 1036 GTGAGGAGGAGGCGGCGGCTGAAAGCTTCCAAAGCGGCTGCACAAAGCGGCTCACGATC 1095
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Db 1096 GACGAGAGGAGGCGGAGCTGCGGCGGCGATGTTCTGGAAGCGCTTCCATGTCATC 1155
QY 1416 CCACGAGAGTTAAATTTAAATTAACCAATTCGTTTCTGATGATCGAGCAGAACTAAA 1475
D 1475
Db 1156 CCGCGGAGGTCAGTTTCAACAAAGCGCTTCTGCTTCTGATGATCGAGCAGAACTAAA 1515
QY 1476 AGCCCATTTTATGGGTAAAGTTGTCAACCCCAACTCAGAAAT 1518
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RESULT 5

US-09-299-141-4
; Sequence 4, Application US/09299141
; Patent No. 6461606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SIHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
; FILE REFERENCE: 4300.011800
; CURRENT APPLICATION NUMBER: US/09/299,141
; EARLIER FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 4
; LENGTH: 5932
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:p43C-AT
US-09-299-141-4

Query Match 28.4%; Score 433.2; DB 4; Length 5932;
Best Local Similarity 59.7%; Pred. No. 1.7e-102;
Matches 729; Conservative 0; Mismatches 493; Indels 0; Gaps 0;

QY 298 TGTGTGGTAGTCTCTGTTTCCAGTCAAGGCCATGGAAGACCCCTCAAGCGGACGCG 357
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Db 1347 TGGAGCGCTGTGCTCCCTGGTGGTCTGCTCCCTGCTGAGGATCCCGGAGGATGCTG 1406
QY 358 CTCAAAAACCGACACAGCTGATCAGCAAGACCATCCGACTTTTAAATAATTAAT 417
D 417
Db 1407 CCCAGAGACAGATATATCCACCATGATCAGGATCACCCCAACCTTCAACAAGATCACCC 1466
QY 418 CAATTTAGCCGAATTTGCTTTCTTTGATGACAAATTTAGCTCATCAAAAGTAAATCTA 477
D 477
Db 1467 CCAACCTGTGCTGAGTTCGCTTCAGCCTATACCGCCAGCTGGCACACCCAGTCCACACGA 1526

QY 478 CTAACATTTTTTTAGTCTCTGTTTCTATTGCCACTGCTTTCGCCCATGTTGAGTTAGGTA 537
D 537
Db 1527 CCATATCTCTCTCCCCAGTGAGCATCGCTTACAGCCTTTGCAATGCTCTCCCTCGGGA 1586
QY 538 CTAAGCCGATACCCATGACGAGATTTTAGAAGGTTTAACTTTAAATTTGACCCCAATTC 597
D 597
Db 1587 CCAAGGCTCACACTCACGATGAATCTCGGAGGCGCTGAATTTCAACTCACGAGATTC 1646
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QY 718 ACAATTTCTAGAGAGCTCAAGAACTTATCATAGTGAAGCTTTTACGTTTAAATTTT 777
D 777
Db 1767 ATAAGTTTTTGGAGGATTTAAAAAGTTGTACCACTCAGAAGCCTTCACTGTCACTTCG 1826
QY 778 GTGATCTAGAGAGCTCAAGAACTTAAATTAATGATTATGTGAGAAAGGACCCAGGTA 837
D 837
Db 1827 GGGACACCAAGAGGCCAAGAAACAGATCAACGATACGTTAGTGAGAGGCTTCAAGGTA 1886
QY 838 AGATCGTTGACCTAGTTAAAGAAATTAGATCTGATACCGTCTTCGCACTAGTTAACTATA 897
D 897
Db 1887 AAATTTGTTGATTTGGTCAAGGAGCTTGACAGAGACACAGTTTTTGTCTGGTGAATTACA 1946
QY 898 TTTTTCAGGGTAAGTGGGAAGCTCTTTCGAGGTTTAAAGATACCTGAAAGAGAAAGATT 957
D 957
Db 1947 TCTTCTTTAAAGGCAATGGGAGAGACCTTTGAAGTCAAGAGACACCGAGGAGAGGACT 2006
QY 958 TTCATGTTGATCAAGTTACTACTGTCAAAGCTTCCAATGATGAAAGACTGGGTATGTCA 1017
D 1017
Db 2007 TCCAGTGGGAGGAGTACCCAGCTGAGGAGGCTGCTATGATGAAGCGCTTTAGGCGATTTA 2066
QY 1018 ATATCAACATTTGCAAAAAATTAAGTTCTTGGGCTTTATTAATGAAGTATTTAGGTAAGC 1077
D 1077
Db 2067 ACATCCAGCACTGTGAAGAGCTGTCCAGCTGGGTGCTGATGAATACCTGGGCAATG 2126
QY 1078 CTACTGCTATTTTTCACAGAGCAAGGTAAGCTTCAACATTTAGAGATGAGTTGA 1137
D 1137
Db 2127 CCACCGCATCTCTTCCCTGCTGATGAGGAGAACTACAGCACTTGGAAATGAATCA 2186
QY 1138 CTCATGACATTTACTTAAATTTTATGAGAACGAGGATCTGCTAGCGCTTCTCTGCACT 1197
D 1197
Db 2187 CCCAGGATATCATCACCAAGTTCTTGAAGAAATGAAGAGAGGCTGCGCAGCTTACAT 2246
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Db 2247 TACCAAACTGTCCATTTACTTGAACCTATGATCTGAAGAGCGCTCTGGGTCACTCACT 2306
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Db 2367 AGCTCTCAAGGCGGTGATAGGCTGTCTGACCATCAGCAGAGAAAGGAGGAGGAGGAGG 2426
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QY 1438 AACCATTTCTTTCTGATGATCGAGCAGAACTTAAAGGCCACTTTTATGGTAAAG 1497
D 1497
Db 2487 AACCTTTTCTTTTAAATGATTTGAACAAATACCAAGTCTCCCTCTTCTCATGGGAAAG 2546
QY 1498 TTGTCAACCCCACTCAGAAATGA 1519
D 1519
Db 2547 TGTGTAATCCCAACCAAAATA 2568

Db 247 CCAACCTGGCTGAGTTCGCCCTTCAGCC

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Db 3059 ACATCCAGCACTGTAGAAGCTGTCCAGCTGGGTGCTGCTGATGAAATAT

Db 3059 ACATCCAGCACTGPAAGAAGCTGTCCAGCTGGGTGCTGCTGATGAATACCTGGGCAATG 3118

Db 3059 ACATCCAGCACTGTAAAGAAGCTGTCCAGCTGGGTGCTGCIGATGAATACCCAGGCGCTTC

QY 478 CTAACATTTTTTTAGTCTGTTCTTATGACCACTGCTTTGCCCATGTTGAGTTAGGTA 537
Db 307 CCAATATCTCTCTCCCGAGTGAGCATCGCTACAGCCTTTGCAATGCTCTCCCTGGGGA 366
QY 538 CTAAGCCGATACCCATGACGAGATTTTAGAGGTTTAAACTTTAAATTTGACCGAAATCC 597
Db 367 CCAAGGCTGACACTCAGATGAATCCCTGGAGGCGCTGAATTCACCTCAGGAGATTC 426
QY 598 CAGAAGCCCAATTCACGAGGCTTTTCAAGAGTTGCTTGAGAACTTTGAATCAACCTGATT 657
Db 427 CGGAGCTCAGATCCATGAAGGCTTCCAGGAACCTCTCCGTACCTCAACCCAGCAGACA 486
QY 658 CTCAATTTGCAATTAACACTACTGTGAAGCTTTATTTTCTGCTGAAGTTTAAATTTGTTG 717
Db 487 GCCAGCTCCAGCTGACCCAGCAGATGCCCTGCTCCTCAGCAGGCGCTGAAGCTAGTG 546
QY 718 ACAATTTCTAGAAGAGCTCAAGAACTATATCATAGTAGGCTTTTACCGCTTAAATTTTG 777
Db 547 ATAAGTTTGGAGGATGTTAAAGTTGTACCACTCAGAAAGCCTTCACTGTCAACTCG 606
QY 778 GTGATACTGAGGAAGCTAAAGCAATTAATGATTTATGTTGAGAAAGCACCAGGGTA 837
Db 607 GGGACACGAGAGCCCAAGAAACAGATCAACGATTAAGTGGAGAGGGTACTCAAGGGA 666
QY 838 AGATCGTTGACCTAGTTAAAGAAATTAGATCGTGAACGCTTCCGCACTAGTTAACTATA 897
Db 667 AAATTTGTGGATTTGTTCAAGGAGCTTGACAGACACAGTTTTCCTGCTGCTGAATTACA 726
QY 898 TTTTCTTTCAAGGTAAGTGGGAAGCTCTCTTCAGAGTTAAAGTACTGTAAGAGGAAGATT 957
Db 727 TCTCTTTTAAAGGCAATTTGGGAGAGACCTTTTGAAGTCAAGGACACCCAGGAGAGACT 786
QY 958 TTCTATTTGATCAAGTTACTACTGTCAAGTTCCAAAGTTCCAAATGATGAAGAACTGGGTATGTTCA 1017
Db 787 TCCAGCTGGACAGGTGACCACTGAGGTGCTTATGATGAAGCGTTTGGCATGTTTA 846
QY 1018 ATATTCAACATTTGCAAAATTAAGTTCTTTGGTCTTTTAAATGAAGTATTTAGGTAACG 1077
Db 847 ACATCCAGCACTGTAAGAAGCTGCCAGCTGGGTGCTGCTGATGAATACCTGGGCAATG 906
QY 1078 CTACTGCTATTTTCTTACCAGCAAGGTAAGCTTCAACATTTAGAGAATGAGTTGA 1137
Db 907 CCACGCCATCTCTCTCGCTGATGAGGGAACTACAGCACCTCGGAAATGAATCA 966
QY 1138 CTATGACATTTACTAAATTTTATAGAAAGGAGGATCGTCTAGCGCTTCTCGACC 1197
Db 967 CCCAGATATCATCAACCAAGTTCTTGAAATGAAGACAGAGGCTGCGCAGCTTACATT 1026
QY 1198 TGCCAAAGTTAAGTATCACCGGTACTTTACGACTTAAATCTGTTTTAGGCCAGTTAGGTA 1257
Db 1027 TACCCAACTGTCCATTTACTGGAACCTTATGATCTGAAGAGCGCTCTGGGTCACTGGGA 1086
QY 1258 TTACCAAGTTTCTTCAACCGTGCCGATTTGAGTGGTACTGAAGAAGCTCCATTA 1317
Db 1087 TCACTAAGTCTTCAGCAATTTGGGGTGACCTCTCCGGGGTCAAGAGGAGGCCCTGA 1146
QY 1318 AATTGAGTAAGCTGTTTCAAAAAGCGCTTCTTAATTTGATGAAGAGGTCACGAGGCCG 1377
Db 1147 AGCTCTCAAGGCGTGATAGGCTGCTGACCATCAGCAGAAAGGAGCTGAAGCTG 1206
QY 1378 CCGGCGCTATGTTCTCGGAAGCTTATTCCAATGAGCAATCCACAGAAAGTTAAATTAATA 1437
Db 1207 CTGGGCGCATGTTTTAGAGGCCATACCCATGCTATCCCCCCCGAGGTCAGTTCAACA 1266
QY 1438 AACCATTCGTTTTCTGATGATCGACGACAACTAAAGCCCATTTGTTATGGGTAGG 1497
Db 1267 AACCTTTGTCTTCTTAAGTATGAACAAATACCAAGTCTCCCTCTTCTATGGGAAAG 1326
QY 1498 TTGTCACCACTCAGAACTA 1519
Db 1327 TGGTGAATCCCAACCAATA 1348

RESULT 13

US-09-299-141-3

: Sequence 3, Application US/09299141

: Patent No. 6461606

: GENERAL INFORMATION:

: APPLICANT: FLOTTE, TERENCE R.

: APPLICANT: SONG, SIHONG

: APPLICANT: BYRNE, BARRY J.

: APPLICANT: MORGAN, MICHAEL

: TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY

: FILE REFERENCE: 4300.011800

: CURRENT APPLICATION NUMBER: US/09/299,141

: EARLIER FILING DATE: 1999-04-23

: EARLIER APPLICATION NUMBER: 60/083,025

: NUMBER OF SEQ ID NOS: 13

: SOFTWARE: PatentIn Ver. 2.0

: SEQ ID NO 3

: LENGTH: 7054

: TYPE: DNA

: ORGANISM: Artificial Sequence

: FEATURE:

: OTHER INFORMATION: Description of Artificial Sequence: PLASMID de-AT

US-09-299-141-3

Query Match

Best Local Similarity 28.4%; Score 433.2; DB 4; Length 7054;

Matches 729; Conservative 0; Mismatches 493; Indels 0; Gaps 0;

QY 298 TGTGTGTTAAGTCTGTTGTTTCCCACTCAAGGCCATGGAAGACCTTCAAGGCGAGCCG 357
Db 1395 TGGCAGGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1454
QY 358 CTCAAAAACCGACACCACTCATCACCAAGCAAGCACTCCGACTTTTAAATAAATTAATC 417
Db 1455 CCCAGAGACAGATACATCCACCATGTCAGATCAACCACTTCAACAGATCACC 1514
QY 418 CAATTTAGCGAATTTGCTTTTCTTTGATAGACAATTTAGCTCATCAAGTAATTTCTA 477
Db 1515 CCAACCTGGCTGAGTTGCTGCTTACGCTATACCGCAGCTGGCACACCACTGTTCAAC 1574
QY 478 CTAACATTTTCTTTAGTCTGTTTCTATTCGCACTGCTTTCGCCATGTTGAGTTAGGTA 537
Db 1575 CCAATATCTCTTCTCCCACTGAGCATCGCTACAGCTTTGCAATGCTCTCCCTGGGA 1634
QY 538 CTAAGCGCATACCATGACGAGATTTTGAAGGTTTAAACTTTTAAATTTGACCGAAATCC 597
Db 1635 CCAAGGCTGACACTCAGATGAATCTTGAGGCGCTGAATTTCAACCTCAGCGAGATT 1694
QY 598 CAGAGCCCAATTCAGAGGGTTTCAAGAGTTTGAAGACTTTGAATCAACCTGATT 657
Db 1695 CGGAGGCTCAGATCCATGAAGGCTTCCAGAACTCTCCGTACCTCAACCCAGCAGACA 1754
QY 658 CTCAATTTGCAATTAACCTACTGTTAAGCGTTTATTTTGTCTGAAGTTTAAATTTGTTG 717
Db 1755 GCCAGCTCCAGCTGACCCAGCAGGCAATGGCTGTTCTCAGCAGGCGCTGAAGTAGTGG 1814
QY 718 ACAATTTCTTAGAAGAGCTCAAGAACTATATCATAGTGAAGCTTTTACCGTTAATTTTG 777
Db 1815 ATAAGTTTTTGGAGGATGTTAAAGTTTGTACCACTCAAGAGCTTCACTGTCAACTTCG 1874
QY 778 GTGATCTAGGAGCTAAAGCAATTAATGATTTATGTTGAGAAAGCCACCCAGGTA 837
Db 1875 GGGACACCGAAGAGGCAAGAAACAGATCAAGGATTTACGTGGAGAGGCTACTCAAGGA 1934
QY 838 AGATCGTTGACCTAGTTAAAGAAATTAAGCTGATACCTCTTCCGACTAGTTACTATA 897
Db 1935 AAATTTGGATTTGGTCAAGGAGCTTGACAGAGACACAGTTTCTCTGTTGTAATTA 1994
QY 898 TTTTCTTCAAGGGTAAGTGGGAACCTCTTTCGAGGTTAAAGATTAAGTGAAGAGGAGATT 957
Db 1995 TCTTCTTTAAAGCAATGGGAGAGACCTTTTGAAGTCAAGGACACCCAGGAGGAGACT 2054

1746 TGCGAGGCGTGTGTCGCTGCTCCCTGCTGAGGATCCCGAGGAGATGCTG 1805
 358 CTCAAAAACCGACACAGCTATCATCAGGACCAAGACATCCGACATTTTATATAATTAATC 417
 1806 CCAGAGACAGATACATCCACCATGATCAGGATCACCACCTTCAACAAGATCAACC 1865
 418 CAAATTTAGCCGAAATTTGCTTTTCTTTATATAGACAATTTAGCTCATCAAGATAATTTCTA 477
 1866 CCAACCTGCTGAGTTGCTGCTTACGCTATACGCGAGCTGCACACACAGTCCACAGCA 1925
 478 CTAACATTTTCTTTTCTGCTGCTTCTTATTTGCCACATGCTTTTCGCCATGTTTGAAGT 537
 1926 CCAATATCTTCTTCTCCCGAGTGAGCATCGTACAGCCTTTGCAATGCTCTCCCTGGGA 1985
 538 CTAAGCCGATACCCATGACGAGATTTTGAAGGTTTAACTTTTAAATTTTGAACGGAATCC 597
 1986 CCAAGGCTGACATCAGATGAATCTTGGAGGCTGAAATTTTCAACCTTCAACCTGAGATTC 2045
 598 CAGAAGCCCAATTCACGAGGTTTCAAGAGTTTGTGAGAACTTTGAATCAACCTGATTT 657
 2046 CGAGGCTCAGATCCATGAAGGCTTCCAGGAATCTCCGCTACCTTCAACCTCAACGACAGCA 2105
 658 CTCATTTGCAATTAACCTGAGTAAAGGTTTATTTTGTCTGAAGTTTAAATTTGTTG 717
 2106 GCGAGCTCAGATCCATGAAGGCTTCCGCTGAGGAGGCTTCCCTGAGGAGGCTGAACTAGTG 2165
 718 ACATTTCTTAGAGAGCTCAAGAACTATATCATAGTAGAGGCTTTTACCGTTTAAATTTG 777
 2166 ATAAGTTTGGAGGATGTTTAAAGGTTTACCACCTCAGAAGCTTCTCAGTCAACTTCG 2225
 778 GTGATCTGAGGAGCTTAAAGCAATTAATGATTTGTTGAGAAAGGACCCAGGTA 837
 2226 GGGACACGGAAGGCGCAAGAACAGATCAACGATTAACGTTACGTTGGAGAGGTTACTCAAGGA 2285
 838 AGATCGTTGACCTAGTTTAAAGAAATTTAGATCTGATACCGTCTTCGACACTAGTTAACTATA 897
 2286 AAATTTGAGTTTGGTCAAGGAGCTTGACAGACAGATTTTGTCTGTTGATTAATTA 2345
 898 TTTTCTTCAAGGTTAAGTGGGAGCTCTTTCGAGGTTTAAAGATTAAGTAAAGTAAAGTAA 957
 2346 TCTTCTTTAAGGCAATGGGAGAGACCTTTTGAAGTCAAGGACACCGAGGAGGAGACT 2405
 958 TCTATGTTGATCAAGTTACTACTCTCAAGATTTCAATGATCAAGGATCAAGGATGTTCA 1017
 2406 TCCAGCTGGACAGGTTGACCGGTTGAGGTTGCTTATGATGAGGTTAGGCTGTTA 2465
 1018 ATATTCAACATTTGCAAAAAATTAAGTTCTTGGGCTTTTAAATGAAGTAAAGTAAAG 1077
 2466 ACATCCAGCAGTGAAGAGCTGCTCCAGCTGGTCTGCTGATGAATTAACCTGGGCAATG 2525
 1078 CTACTGCTATTTTATTTTACAGAGAGGTTAAGCTTCAACATTTAGAGATGAGTTGA 1137
 2526 CCACCGCATCTTCTTCTGCTGATGAGGGAATACAGCACCCTGGAAATGAATCA 2585
 1138 CTATGACATTTTACTTAAATTTTATAGAGAGGAGGATCGTACGCTCTCTGACAC 1197
 2586 CCCAGATATCATCAACAGTTTCTTGGAAATGAAGACAGAGGCTGCCAGCTTACAT 2645
 1198 TGCCAAAGTTAAGTATCACCGTACTTACGACTTAAATCTCTTTAGCCAGTTAGGTA 1257
 2646 TACCCAACTGCTCCATTTACTGGAACCTATGATCTGAAGAGCTCTGGGTCAACCTG 2705
 1258 TTACCAAGTTTCTTACCGTGGGATTTGAGTGGTCTTACTGAAGAGCTCCATTA 1317
 2706 TCACTAAGTCTTTCAGCAATGGGCTGACCTCTCCGGGTCAACAGAGGAGGACCCCTGA 2765
 1318 AATTGAGTAAAGCTTCAAGAGGCTCTTAACTATTGATGAAAGGTTACCGAGCGG 1377
 2766 AGCTCTCCAGGCGGTGATAGGCTGCTGACCATCAGCAGAAAGGAGTGAAGCTG 2825
 1378 CCGGCGCTATGTTCTCGAAGCTTATTCATAGAGATTCACACAGAGTTAAATTAATA 1437
 2826 CTGGGCCATGTTTATAGAGGCCATACCATGCTATCCCCCGGAGGTTCAAGCA 2885

958 TTCAATGATCAAGTTACTACTCTAAAGTTCCAATGATCAAGAGACTGGTATGTTCA 1017
 2055 TCCAGTGGACAGGTTGACACCTGAGGTTGCTATGATGAAGCTTTTATAGGATGTTTA 2114
 1018 ATATTCAACATTTGCAAAAAATTAAGTTCTTGGGCTTTTAAATGAAGTAAAGTAAAG 1077
 2115 ACATCCAGCAGTGAAGAGCTGCTCAGCTGGTGGTCTGCTGATGAATATACCTGGGCAATG 2174
 1078 CTACTGCTATTTTATTTTACAGAGAGGTTAAGCTTCAACATTTAGAGATGAGTTGA 1137
 2175 CCACCGCATCTTCTTCTGCTGATGAGGGAATACAGCACCCTGGAATGAATCA 2234
 1138 CTATGACATTTTACTTAAATTTTATAGAGAGGATCGTACAGAGGCTGCTGACCTTACAT 2294
 2235 CCACGATATCATCAACAGTTTCTTGGAAATGAAGACAGGCTGCTGAGGTTCACT 2294
 1198 TGCCAAAGTTAAGTATCACCGTACTTACGACTTAAATCTGTTTATAGGCTAGGTA 1257
 2295 TACCCAACTGCTCCATTTACTGGAACCTATGATCTGAAGAGGCTCTGGGTCAACTGGGCA 2354
 1258 TTACCAAGTTTCTTACCGTGGGATTTGAGTGGTGTACTGAAGAGCTCCATTA 1317
 2355 TCACTAAGGCTTTCAGCAATGGGCTGACCTCTCCGGGTCAACAGAGGACCCCTGA 2414
 1318 AATTGAGTAAAGCTTTCACAAAGCGCTTTAACTATTGATGAAGAGGTTACCGAGCGG 1377
 2415 AGCTCTCAAGGCGTGCATAGGCTGCTGACCATCGACGAGAAAGGACTGAAGCTG 2474
 1378 CCGGCGCTATGTTCTCGAAGCTTTCATGAGGATTTCCACAGGATTTCCACCAAGTAAATTAATA 1437
 2475 CTGGGCCATGTTTATAGAGGCCATACCATGCTATCCCCCGGAGGTTCAAGTTCAACA 2534
 1438 AACCATCTGTTTCTGATGATCGAGCAGACACACTAAAAGCCCATTTGTTATGGTAAGG 1497
 2535 AACCCCTTGTCTTCTTAAATGATGAACAAATACCAAGTCTCCCTCTTCATGGGAAAG 2594
 1498 TTGTCACACCACTCAGAAGTA 1519
 2595 TGTGTAATCCACCAAAAATA 2616

RESULT 14
 US-09-299-141-2
 ; Sequence 2, Application US/09299141
 ; Patent No. 6461606
 ; GENERAL INFORMATION:
 ; APPLICANT: FLOTTE, TERENCE R.
 ; APPLICANT: SONG, SIHONG
 ; APPLICANT: BYRNE, BARRY J.
 ; APPLICANT: MORGAN, MICHAEL
 ; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
 ; FILE REFERENCE: 4300.011800
 ; CURRENT APPLICATION NUMBER: US/09/299,141
 ; CURRENT FILING DATE: 1999-04-23
 ; EARLIER FILING DATE: 1998-04-24
 ; NUMBER OF SEQ ID NOS: 13
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 2
 ; LENGTH: 7405
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: PLASMID E-AT
 US-09-299-141-2
 Query Match 28.48; Score 433.2; DB 4; Length 7405;
 Best Local Similarity 59.78; Pred. No. 1.8e-102;
 Matches 729; Conservative 0; Mismatches 493; Indels 0; Gaps 0;
 298 TGTGTGGTAAAGTCTCTGTTTCCCGAGTCAAGGCCATGGAAGACCTCAAGGCGAGCGG 357
